

axially fixed with respect to the housing (17), and the screw (11) is rotatably supported with respect to the housing by means of the rolling elements (13) and wherein the screw (11) engages the actuating member (10) through a bearing (12) capable of carrying at least one of an axial load and a radial load.

10. (Twice Amended) Actuator according to claim 1, wherein the piston (10) is held non-rotatably by means of a groove and pin assembly, or by means of a ball/groove assembly.

REMARKS

Claims 1-6 and 9-34 are pending. By this Amendment, claims 7, 8, 11, 15, 28 and 34 are canceled without prejudice or disclaimer, and claims 1 and 10 are amended.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Applicants take this opportunity to acknowledge the indication that claims 3, 7, 10 and 18-20 contain allowable subject matter.

**I. Drawing Objections**

The Office Action asserts that the original disclosure does not support the showing of a cvt (continuously variable transmission) combined with a disk brake. The Applicants respectfully disagree.

The feature of a continuously variable transmission combined with a disk brake was recited in claim 34 of the original disclosure. As such, this feature cannot be considered new matter. Moreover, by previous Amendment, the specification was amended to provide support for this feature. As such, no new matter has been introduced into the disclosure of the application. Approval of the drawing corrections filed on August 1, 2002 is respectfully requested.

The Office Action objects to the drawings under 37 C.F.R. §1.83(a), specifically stating that the features of claims 8, 11-12, 14, 22-23, 26-27 and 31-34 must be shown or the features canceled from the claims. This objection is respectfully traversed.

By this Amendment, claim 8 has been canceled without prejudice or disclaimer, thus obviating the rejection of claim 8.

Applicants respectfully submit that the features of claims 12, 14, 31, 32 and 33 are clearly illustrated in the drawings, as these features are referred to by reference number in the claims with respect to Figs. 1-5. Regarding the features of claims 22, 23, 26 and 27, a Request for Approval of Drawing Corrections was submitted on August 1, 2002, wherein the features of claims 22, 23, 26 and 27 have been shown. It is respectfully requested that the Examiner provide specific examples of features that he asserts are not illustrated in the drawings. Otherwise, approval of the Request for Approval of Drawing Corrections filed August 1, 2002 is respectfully requested.

The Office Action asserts that instant application does not contain a 5<sup>th</sup> figure, and that all references to Fig. 5 appear to have been remove prior to filing. The Applicants respectfully disagree.

Attached herewith is a photocopy of a postcard receipt indicating that four sheets of drawings (1-5) were received by the U.S. Patent and Trademark Office on November 9, 2000. For the Examiner's convenience, a copy of originally submitted Fig. 5 is attached.

## **II. Objections To The Disclosure**

The Office Action objects to the disclosure because the specification lacks section headings. This objection is respectfully traversed.

It is respectfully submitted that section headings in the specification are not required and are merely suggested for the Applicants' use under MPEP §608.01(a). As these section headings are merely suggested, there is no requirement that they be utilized. Withdrawal of the objection is respectfully requested.

The Office Action objects to the application because of alterations which have not been initialed and/or dated as required by 37 C.F.R. §1.52(c). This objection is respectfully traversed.

37 C.F.R. §1.52(c)(2) recites "after the signing of the Oath of Declaration in front of the application papers, amendments may only be made in the manner provided by §1.121." The Applicants submit that this Amendment is in compliance with 37 C.F.R. §1.121 and therefore no additional Oath or Declaration is required. Withdrawal of the objection is respectfully requested.

## **III. Claim Rejections Under 35 U.S.C. §112**

The Office Action rejects claims 8, 11-12, 14, 22-23, 26-28 and 31-34 under 35 U.S.C. §112, first paragraph. This rejection is respectfully traversed.

By this Amendment, claims 8 and 11 have been canceled without prejudice or disclaimer, thus obviating the rejection of these claims. Withdrawal of the rejection of claims 8 and 11 is respectfully requested.

The Applicants submit that the subject matter of claim 12 is supported in the specification at page 5, lines 20-21, where it is stated "the screw 11 is rotatably and

*not there*

translatably held in a cylinder space 59 defined by insert ring 58 inserted in nut 14 of the screw mechanism 5." Withdrawal of the rejection of claim 12 is respectfully requested.

It is further submitted that the subject matter of claims 22 and 23 is supported in the specification on page 3, lines 5-9, where it is stated "also, control means may be provided, said control means having input for a control signal, e.g., from a brake pedal, and being connected to the sensor for controlling the electric motor on the basis of the control signal and the signal from the sensor. Withdrawal of the rejection of claims 22 and 23 is respectfully requested.

The Office Action asserts that claim 31 is directed toward a continuously variable transmission actuated by the actuator of claim 1. The Applicants respectfully disagree. According to Applicants' record, claim 31 is directed to a "screw mechanism module for use in the actuator according to claim 1.

The Office Action rejects claim 8 as not being illustrated or described in an enabling manner. By this Amendment, claim 8 has been canceled without prejudice or disclaimer, thus obviating the rejection of claim 8.

The Office Action rejects claim 28, stating that the feature "hard turning" is unclear. Claim 28 is canceled.

The Office Action rejects claim 15 under 35 U.S.C. §112, second paragraph, asserting that the feature "one or two motors" is unclear. Claim 15 is canceled.

**IV. The Claims Define Allowable Subject Matter**

Claims 1, 2, 4, 9, 13, 21, 25 and 29-30 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,788,341 to Penrod et al. This rejection is respectfully traversed.

By this Amendment, independent claim 1 has been amended to incorporate the features of allowable claim 7. Specifically, claim 1 has been amended to recite "wherein the screw (11) engages the actuating member (10) through a bearing (12) capable of carrying at

least one of an axial load and a radial load." As Penrod fails to disclose this feature and the Office Action admits that claim 7 contains allowable subject matter, claim 1 is now in condition for allowance. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Claims 2, 4, 9, 13, 21, 25 and 29-30 are dependent on allowable claim 1, and are therefore allowable for at least the reasons discussed above, as well as for the additional features recited therein. Withdrawal of the rejection of claims 2, 4, 9, 13, 21, 25 and 29-30 is respectfully requested.

The Office Action rejects claims 1, 2, 4-6, 8, 9, 13, 16, 17, 24, 25, 29 and 30 under 35 U.S.C. §103(a) as being unpatentable over WO 97/17553 in view of U.S. Patent No. 4,850,457 to Taig. This rejection is respectfully traversed.

As stated above, independent claim 1 has been amended to incorporate the features of allowable claim 7. As the Office Action admits that claim 7 is allowable, newly amended independent claim 1 is in condition for allowance. Withdrawal of the rejection of claim 1 is respectfully requested.

Claims 2, 4-6, 8, 9, 13, 16, 17, 24, 25, 29 and 30 are dependent on allowable claim 1 and are therefore allowable for at least the reasons discussed above, as well as for the additional features recited therein. Withdrawal of the rejections of claims 2, 4-6, 8, 9, 13, 16, 17, 24, 25, 29 and 30 is respectfully requested.

The Office Action rejects claim 15 under 35 U.S.C. §103(a) as being unpatentable over Penrod in view of U.S. Patent No. 6,012,556 to Blossch et al. Claim 15 is canceled.

The Office Action rejects claims 16-17 under 35 U.S.C. §103(a) as being unpatentable over Penrod in view of Taig. This rejection is respectfully traversed.

Claims 16 and 17 are dependent on allowable claim 1 and are therefore allowable for at least the reasons discussed above, as well as for the additional features recited therein. Withdrawal of the rejection is respectfully requested.

The Office Action rejects claim 24 under 35 U.S.C. §103(a) as being unpatentable over Penrod. This rejection is respectfully traversed.

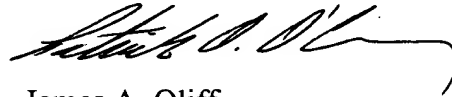
Claim 24 is dependent on allowable claim 1 and is therefore allowable for at least the reasons discussed above, as well as for the additional features recited therein. Withdrawal of the rejection of claim 24 is respectfully requested.

**V. Conclusion**

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Moreover, Applicants submit that the foregoing amendments raise no new issues requiring further search on the part of the Examiner, as the independent claim has merely been amended to incorporate allowable subject matter from a canceled claim. Favorable reconsideration and prompt allowance of claims 1-34 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Patrick O. O'Leary  
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JAO:POO/kxm

Attachments:

Appendix  
Postcard Receipt (copy)  
Figure 5  
Petition For Extension of Time

Date: April 8, 2003

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

**DEPOSIT ACCOUNT USE  
AUTHORIZATION**

Please grant any extension  
necessary for entry;  
Charge any fee due to our  
Deposit Account No. 15-0461

## APPENDIX

## Changes to Claims:

Claims 7, 8, 11, 15, 28 and 34 are canceled.

The following is a marked-up version of the amended claims:

1. (Twice Amended) Screw actuator, comprising a housing (17), a motor (7), an actuating member (10) and a screw mechanism (5) which provides a linear movement of the actuating member with respect to the housing in response to a rotational movement of the motor (7), which screw mechanism (5) comprises a screw (11), a nut (14) engaging each other by rolling elements (13), one of said screw (11) and nut (14) being rotatably supported with respect to the housing (17), and a reduction gear means (6), wherein the nut (14) is axially fixed with respect to the housing (17), and the screw (11) is rotatably supported with respect to the housing by means of the rolling elements (13) and wherein the screw (11) engages the actuating member (10) through a bearing (12) capable of carrying at least one of an axial load and a radial load.

10. (Twice Amended) Actuator according to claim 7~~1~~, wherein the piston (10) is held non-rotatably by means of a groove and pin assembly, or by means of a ball/groove assembly.



PTO RECEIPT FOR FILING OF **ERS**

The following papers have been filed:

PCT Appln. Trans. ltr & Ck #113560 (\$1,112), PCT Request, Preliminary Amendment, 10 pp.  
spec., 34 clms, Abst., 4 shts of drwgs (1-5), Decl., IDS, PTO-1449 w/6 refs., and Inter. Natl.  
Srch Rpt

Name of Applicant: Armin Herbert Emil August OLSCHIEWSKI, Hendrikus Jan

Serial No. U.S. National Stage of PCT/NL99/00303

Atty. File No. 107775

Title (New Cases): SCREW ACTUATOR, AND BRAKE CALLIPER COMPRISING SUCH  
ACTUATOR

Sender's Initials: JAO:TJP/emb

09/700023  
526 Rec'd PCT/PTO 09 NOV 2000